

CDS620 Cyber Investigations and Incident Management

(3 credit hours)

Course Syllabus

Course Description

Cyber Investigations and Incident Management will cover the collection, processes, preservation, analysis, and presentation of computer related evidence. It will also cover the tactics, techniques, and procedures for a full range of investigative tools and processes. Responding to urgent situations and mitigating immediate threats will also be covered.

Course Learning Outcomes

By the end of this course, you will be able to:

1. Identify cyber threats and vulnerabilities that may jeopardize an organization.
2. Describe common intrusion detection methodologies and techniques.
3. Propose a process for conducting investigations and reporting, to include use of appropriate investigative tools, within the limits of current laws/regulations.
4. Propose a process for seizing and preserving digital evidence.
5. Analyze an organization for its crisis management protocols, processes, and techniques.
6. Describe the judicial process, including the presentation of facts and evidence
7. Explain the procedures to preserve the integrity of evidence.

Prerequisites/Corequisites

None.

Required Textbook(s) and Resources

Links to all required reading materials will be provided within the online course.

Be sure to also review the weekly **Explore** sections for additional library or web resources. For access to databases, research help, and writing tips, visit the [Tiffin University Library](#). You might consider registering for one of the library's many webinars on library research, source evaluation, copyright, and other topics, at the [Library Events - Upcoming Events](#) web page. For further assistance email a librarian, at: library@tiffin.edu.

Time Commitment

Effective time management is possibly the single most critical element to your academic success. To do well in this online class you should plan your time wisely to maximize your learning through the completion of readings, discussions, and assignments. Because of our accelerated, seven-week term, TU online courses are designed with the expectation that you dedicate a little over **six (6)** hours per credit hour to course activities and preparation **each week**. For example, for successful completion of a three-credit, seven-week online course you should reserve roughly **twenty (20) hours per week**.

To help plan your time and keep on track toward successful course completion, note the distinctive rhythm of assignment due dates:

1. All times assume Eastern Time (GMT-4).
2. Weeks begin at 12:00 a.m. ET on Monday and end at 11:55 p.m. ET on Sunday.
3. Unless otherwise noted, initial assignments or discussion posts are due by **11:55 p.m. ET on Wednesdays**.
4. Additional assignments or follow-up discussion posts are due by **11:55 p.m. ET on Saturdays, and**
5. Major assignments and reflections are typically due by **11:55 p.m. ET on Sundays**.

Learning Activities

There will be different types of activities to assess your progress through the course topics. You can estimate three activities per week on average. There will be a weekly discussion forum and written assignments. A research paper on a topic of your choice related to the course content will also be required with individual elements due at various times throughout the course.

Key Assessment (Taskstream Submission)

This TU course features a “Key Assessment” that provides you the opportunity to demonstrate your program’s core competencies. It also shows how the course fits within the broader curriculum. For this course, Activity 7.2: Final Paper in Week 7 has been designated as a Key Assessment. You will upload it both to the assignment and to Activity 7.2b: Taskstream Assignment.

Grading

The chart below identifies the individual contributions from each type of activity, per week.

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Total
Discussions 25	Discussions 25	Discussions 25	Discussions 25	Discussions 25	Discussions 25	Discussions 25	175
Assignments 100	Assignments 125	Assignments 100	Assignments 100	Assignments 150	Assignments 100	Assignments 150	825
	Reflection (Extra Credit) 10	Reflection (Extra Credit) 10	Reflection (Extra Credit) 10	Reflection (Extra Credit) 10	Reflection (Extra Credit) 10	Reflection (Extra Credit) 10	
125	150	125	125	175	125	175	1000

Grading Scale

A: 90-100%

B: 80-89%

C: 70-79%

F: <70%

Please see the [Academic Bulletin](#) for grade appeal information.

Course Schedule and Weekly Checklist

Week 1 - Introduction to Cyber Investigations and Incident Management

- WED: Activity 1.2: Cyber Security Incident and Event - Initial Post
- SAT: Activity 1.2: Cyber Security Incident and Event - Secondary Posts
- SUN: Activity 1.3: Cyber Security Incident Management

Week 2 - Incident Response Processes

- WED: Activity 2.1: Intrusion Detection - Initial Post
- SAT: Activity 2.1: Intrusion Detection - Secondary Posts
- SUN: Activity 2.2: Final Paper Topic
- SUN: Activity 2.3: Reflection Assignment (Extra Credit)

Week 3 - Seizure of Digital Information

- WED: Activity 3.1: Preserving Privacy & Digital Evidence - Initial Post
- SAT: Activity 3.1: Preserving Privacy & Digital Evidence - Secondary Posts
- SUN: Activity 3.2: The Fourth Amendment & Digital Evidence
- SUN: Activity 3.3: Reflection (Extra Credit)

Week 4 - Conducting Cyber Investigations

- WED: Activity 4.1: Cyber Investigative Tools - Initial Post
- SAT: Activity 4.1: Cyber Investigative Tools - Secondary Posts
- SUN: Activity 4.2: Knowledge Management & Organizational Readiness
- SUN: Activity 4.3: Reflection (Extra Credit)

Week 5 - Legal Aspects of Investigative Practices

- WED: Activity 5.1: Jurisdiction and Surveillance - Initial Post
- SAT: Activity 5.1: Jurisdiction and Surveillance - Secondary Posts
- SUN: Activity 5.2: Literature Review
- SUN: Activity 5.3: Reflection (Extra Credit)

Week 6 - Digital Forensic Analysis

- WED: Activity 6.1: Preserving Evidence in Mobile Forensics - Initial Post
- SAT: Activity 6.1: Preserving Evidence in Mobile Forensics - Secondary Posts
- SUN: Activity 6.2: Live vs. Static Analysis Procedures
- SUN: Activity 6.3: Reflection (Extra Credit)

Week 7 - Cyber Crime Prevention

- WED: Activity 7.1: Defense in Depth - Initial Post
- SAT: Activity 7.1: Defense in Depth - Secondary Posts
- SUN: Activity 7.2: Final Paper
- SUN: Activity 7.3: Reflection (Extra Credit)

Tips for Success

Online learning requires self-discipline and self-direction. As seekers of the truth, we should be willing to challenge one another's academic work in a spirit of respectful comradery. Your course is a place for you to grow as you benefit from the expertise, experience, and diverse perspectives of your instructor and peers. Constructive feedback will challenge you to stretch your own thinking, thereby expanding your knowledge and understanding.

To get the most out of your learning experience, you should actively engage (participate) in **ALL** course activities. Course elements are arranged chronologically. To complete a week, simply work your way "down the page" through all of the course materials and activities.

Your Instructor Will Expect You to:

- Thoroughly review orientation materials (Start Here) within the first 48 hours of the term.
- Monitor your TU email account **daily** for important updates and announcements.
- Take ownership of your learning experience and act in a proactive, self-directed manner. That means:
 - Fully participate in all learning activities.
 - Complete assignments as described in rubrics or other instructions.
 - Submit all work on time and in the specified format (e.g. APA format for citations).
 - Utilize and incorporate instructor provided feedback to improve your work.
 - Ask questions so you can better understand course material or assignments.
 - Use the highest standards of intellectual honesty and integrity. For more information, see the TU Library guide: [Digital Literacy: Netiquette and Internet Safety](#).
 - Treat others respectfully and demonstrate "netiquette" (online politeness and respectfulness) at all times. TU celebrates cultural uniqueness and expects all students to be considerate and thoughtful throughout their learning experiences.

You Should Expect Your Instructors to:

- Post an introductory announcement/email at the beginning of each week to provide updates and help you prepare for the week's activities.
- Maintain an active and engaged presence in all course activities and throughout the course.
- Respond to your emailed questions within 48 hours, if not sooner.
- Clearly communicate any absences or expected non-participation due to extenuating circumstances. For example, "I will be traveling to attend a funeral this week and may not be able to respond to questions or participate in forums for a couple of days."

- When grading your work:
 - clearly indicate their grading approach (what they like to see in submitted work as well as what types of errors they tend to penalize more harshly),
 - thoroughly review and evaluate your submissions in a timely manner (in less than 5 days for most assignments), and
 - provide constructive feedback that indicates the strengths and weaknesses of your work and provides suggestions on how you can improve your performance on future assignments.
- Advocate for your success as a learner and help guide you toward successful completion of the course activities and most importantly, attainment of the course learning outcomes.

Accommodations (Disability Services)

The Office of Disability Services supports the institutional commitment to diversity by providing educational opportunities for qualified individuals with disabilities through accessible programs and services in compliance with Section 504 of the Rehabilitation Act of 1973 and Title III of the Americans with Disabilities Act (ADA) of 1990. If you need reasonable accommodations due to a documented disability, contact the Office for Equity, Access, & Opportunity via email at disabilityservices@tiffin.edu or by calling 419-448-3021.

Technical Support

For Moodle support, either email moodlesupport@tiffin.edu or call the 24/7 Technical Support Call Center at 855-664-1200 (3430, Option 2, from on-campus). For non-Moodle support, contact the Tiffin University ITS helpdesk at the number above or submit a [support ticket](#).

Veterans

The Veteran and Military Resource Center assist veterans, active Military, and spouses of current service members in utilizing their education benefits. VMRC provides information regarding benefit processes and procedures, as well as support in navigating the transition from military to academic life by facilitating connections with the appropriate support services on campus. More information can be found on the Veteran and Military Resource Center website, at <http://www.tiffin.edu/va>.

Comments or Concerns

TU's online programs are designed to be student *driven*: to empower you with a voice and stake in your learning. Our courses feature multiple and varied ways that you can share feedback, and we invite you to become an active voice and help drive our improvement

efforts. In addition to providing in-course feedback, we encourage you to submit questions or comments directly to the online team at online@tiffin.edu.